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(54) Title: SELECTIVE TOXICITY OF AMINO-TERMINAL MODIFIED RNASE A SUPERFAMILY POLYPEPTIDES

(57) Abstract

This invention provides RNase A superfamily polypeptides with modified amino terminal which can be used to selectively kill target Kaposi's sarcoma cells, neoplastic endothelial cells, and non-neoplastic endothelial cells. In certain embodiments of the invention, the amino terminal modification consists of an addition of 4 amino acid sequence consisting of the SLHV sequence at position -4 to -1 to the eosinophil derived neurotoxin protein. The amino terminal addition is capable of directing the claimed RNase A superfamily polypeptides to proliferating endothelial cells, such as Kaposi's sarcoma cells, and selectively killing these cells.

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